INDUSTRY PROFILES

Professional, Scientific and Technical Services Industry

June 2013

Alberta

Overview:

The Professional, Scientific and Technical Services industry[1] in Alberta includes enterprises that make knowledge and skills available to other organizations or to the public, often on a project basis. For example, they may provide:

- legal services and accounting and related services;
- architectural, engineering and related services;
- surveying and mapping services;
- graphic, industrial or computer systems design services;
- management, scientific and technical consulting services, research and development services;
- advertising, public relations or market research services;
- translation services; and
- veterinary services.

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[1] North American Industry Classification System (NAICS) major group 54

Section A: Business Environment

1. 2012 Employment and Unemployment Numbers and Rates:

	Alberta	Professional, Scientific and Technical Services Industry
Number of employed	2,149,600	157,900
Percent employed in the industry		7.3%
Number of unemployed	103,800	3,500
Unemployment rate	4.6%	2.2%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2013

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics[2] or Statistics Canada[3] websites.

2. Industry's Growth:

- This industry accounted for 7.3% of total employment in Alberta in 2012.
- Employment in the Professional, Scientific and Technical Services industry is expected to grow at an average rate of 2.7% from 2011 to 2015.
- This industry is expected to account for 7.6% of total employment in Alberta in 2015.

For more information, see the *Alberta Modified Canadian Occupational Projection System (COPS) Outlook 2011 – 2015, Industry Employment Outlook*[4] online and the Alberta Learning Information Service (ALIS)[5] website for descriptions of industries.

[2] See http://www.eae.alberta.ca/lmi
[3] See http://www.statcan.gc.ca
[4] See http://eae.alberta.ca/labour-and-immigration/labour-market-information/labour-market-forecasts.aspx
[5] See http://www.alis.alberta.ca

3. Facts, Trends and Outlook:

According to Statistics Canada's National Economic Accounts, the Professional, Scientific and Technical Services industry accounted for 5.3% of Alberta's Gross Domestic Product in 2011, up from 4.5% in 2001. This industry's share of Alberta's total employment was 7.3% in 2012, the same as in 2002.

Employment in 2012 was 3.4% lower that its level in 2011. Over the last ten years, employment (the total number of employees and self-employed people) increased from 121,600 people in 2002 to 157,900 people in 2012. There were 104,800 employees in the industry in 2012 of whom 93.5% were permanent and 6.5% were temporary. Self-employed people accounted for 33.6% of total employment in the industry in 2012.

Characteristic	Alberta	Professional, Scientific and Technical Services
Median Retirement Age (years)	63.7	62.1
Average Number of Hours Worked per Week	38.2	38.8
Multiple Jobholders (% of total employment)	5.7%	5.4%
Average Job Tenure (months)	88.8	80.8
Employees Under Union Coverage (%)	23.5%	4.0%
Employees Working Overtime per Week (%)	26.0%	30.3%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0022, 282-0031, 282-0042, 282-0078 and 282-0084, 2013, and custom tabulation (median retirement age)
Note: The percentage of multiple jobholders in Alberta is obtained by dividing the number of multiple jobholders in Alberta by total employment in Alberta. The percentage of multiple jobholders in the industry is obtained by dividing the number of multiple jobholders in the industry by total employment in the industry. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.

According to *Alberta Occupational Demand Outlook 2012-2016*[6], employment growth in most occupations is expected to be below 2.4%, the average for all occupations.

[6] See http://eae.alberta.ca/labour-and-immigration/labour-market-information/labour-market-forecasts.aspx

4. Size of Businesses in Alberta and the Industry:

Establishment Size	Businesses in Alberta		Businesses in Professional, Scientific and Technical Services	
	Number of Employees	%*	Number of Employees	%*
Less than 20 employees	633,200	35.1%	36,000	34.4%
20 to 99 employees	634,600	35.2%	33,900	32.3%
100 to 500 employees	342,100	19.0%	25,500	24.3%
Over 500 employees	194,400	10.8%	9,500	9.1%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0076, 2013

* Percentages may not add up to 100 due to rounding.

Note: Statistics Canada's survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the industry, except by coincidence.

Section B: Human Resources Profile

1. Occupational Information:

Some examples of occupations in the Professional, Scientific and Technical Services industry include:

- accountant;
- architect;
- civil engineer;
- graphic designer; and
- lawyer.

For a complete listing of all occupations related to this industry as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles[7] website.

2. Demographics: Gender and Age:

According to the Labour Force Survey, the gender breakdown in the Professional, Scientific and Technical Services industry in 2012 was as follows:

- women employed: 67,800 people, or 42.9%
- men employed: 90,100 people, or 57.1%

In Alberta, women accounted for 44.8% and men made up 55.2% of total employment.

Age Characteristics	Employment in Alberta		Employment in Professional, Scientific and Technical Services	
	Number	%	Number	%
15-24 years	315,500	14.7%	12,000	7.6%
25-54 years	1,458,300	67.8%	115,300	73.0%
55 years and over	375,800	17.5%	30,600	19.4%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2013

[7] See http://www.alis.alberta.ca/occinfo

3. Wages:

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0072, 2013
Note: The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

Wage and Salary Information for Selected Occupations

Occupation	Average Hourly Wage			Average Annual Salary
	Starting Average	Overall Average	Top Average	
Lawyer and Quebec notary	$ 36.23	$ 52.53	$ 74.04	$ 104,955
Electrical engineer	$ 38.09	$ 48.08	$ 63.44	$ 99,030
Graphic designer	$ 24.02	$ 30.81	$ 40.15	$ 60,375
Veterinarian	$ 42.09	$ 53.09	$ 68.66	$ 96,624

Data Source: 2011 Alberta Wage and Salary Survey

For more information on the 2011 Alberta Wage and Salary Survey, refer to the WAGEinfo[8] webpage. For job descriptions, duties, required skills and education for specific occupations in the Professional, Scientific and Technical Services industry, visit the ALIS[9] website.

[8] See http://www.alis.alberta.ca/wageinfo
[9] See http://www.alis.alberta.ca

Section C: Additional Information

Links to Selected Associations in Industry:

- Alberta Association of Architects
  (http://www.aaa.ab.ca)
- Alberta Innovates Technology Futures
  (http://www.albertainnovates.ca)
- Alberta Land Surveyors' Association
  (http://www.alsa.ab.ca)
- Association of Professional Engineers, Geologists and Geophysicists of Alberta
  (http://www.apegga.org)
- Certified General Accountants' Association of Alberta
  (http://www.cga-alberta.org)
- Chartered Accountants of Alberta
  (http://www.albertacas.ca)
- Economic Developers of Alberta
  (http://www.edaalberta.ca)
- Law Society of Alberta
  (http://www.lawsocietyalberta.com)